tion on a false path by asserting causes of four kinds; and from that time to this the whole topic has been obscured by a welter of confused thinking of which Aristotle's expression ' final cause ' is the outstanding sign and symptom. To assign the cause of any particular event is to perpetuate the primitive anthropomorphic way of thinking about causation. We do better to avoid entirely the use of the substantive * the cause '. Even in the kind of causation in which a human agent plays a prominent part, the man does but intervene in some highly complex stream of dynamic processes. Suppose that A insults B, and B forthwith pulls out a pistol and shoots A dead. What was ' the cause* of B's death ? Was it the effusion of blood in B's brain ? The medical witness at the inquest would say Yes. Was it the bullet ? Was it the pistol ? Was it the explosion in the cartridge ? Was it A ? Was it the movement of A's trigger-finger ? Was it A's sudden anger ? Was it B himself who, having grossly injured A, piled intolerable insult upon injury ? Was it the old family feud and long-standing reciprocal hatred of the two men ? And so on, up the stream of time.

The common error mentioned just now is to identify causal explanation with mechanical explanation. Many men of science who are victims of this common error tell us that they accept the mechanistic biology because they hold that to give up the attempt at mechanistic explanation is to resign all hope of explaining biological

processes ; and that, they rightly feel, would be to resign the hope of understanding them in any practically useful sense of the word * understanding '. For it is only causal explanation and understanding that enable us to intervene explicitly to direct the course of natural pro-